nationalgrid

Multi-currency on PRISMA

CAM-CMP Development Workgroup 2

General

- ECB publishes FX rates daily at 14:00 GMT.

- PRISMA will automatically pull in the latest daily FX rates at 14:15 GMT.

- The FX rates will be viewable on a dedicated screen on PRISMA (viewable by public visitors also).

- In case download fails then the FX rate can also be manually updated by PRISMA.

- In case a 2nd FX rate is entered for any one day then, for Transparency, the older rates are not overwritten but will remain.

- An auction will always use the latest FX rate available.

Ascending Clock

- Bids are placed in volumes at steps so the platform does not need to convert currency for this algorithm.

- However the following additional information will be provided (for information purposes)

  - The actual FX rate will be displayed.

  - The total of the 2 reserve prices (starting price) can be displayed in either currency.

  - The total price of a Users bid can be viewed in either currency.

Uniform Price

- PRISMA publishes the auction with the actual FX rate relevant for that auction.

- The starting price for the auction can be viewed in either currency.

- Bids can be submitted in either currency.

- At the end of the bid window, bids will be converted to a common currency unit (Euros) so the bid stack can be evaluated.

- The bid values will be converted to the relevant currency for both TSOs.

- National Grid will invoice for its share of the bid value in £ sterling.

Timings for daily auctions

- FX rate is called at 14:15 GMT on day D.

- Firm Day Ahead auction held at 15:30 GMT on day D (for D+1) will use this FX rate.

- Within day auctions for D+1 will still use the exchange rate called on D until a new exchange rate is called at 14:15 on Day D+1

- Within day auctions for D+1 from 15:00 GMT onwards will use the new exchange rate called on day D+1.

- A single FX rate will be used for any one auction from bidding through allocation to invoicing.

1:n bundling

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1:n bundling

- Available capacity for TSO A needs to be bundled with available capacity from more than one adjacent TSO.

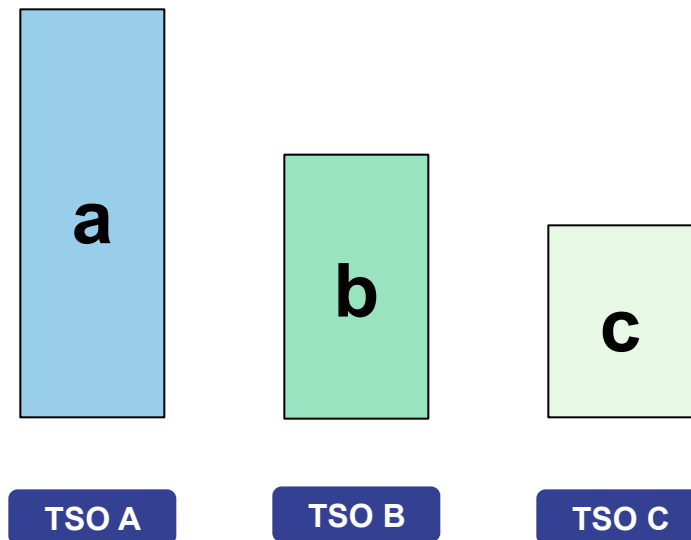- For the UK only 1:2 bundling scenarios exist.
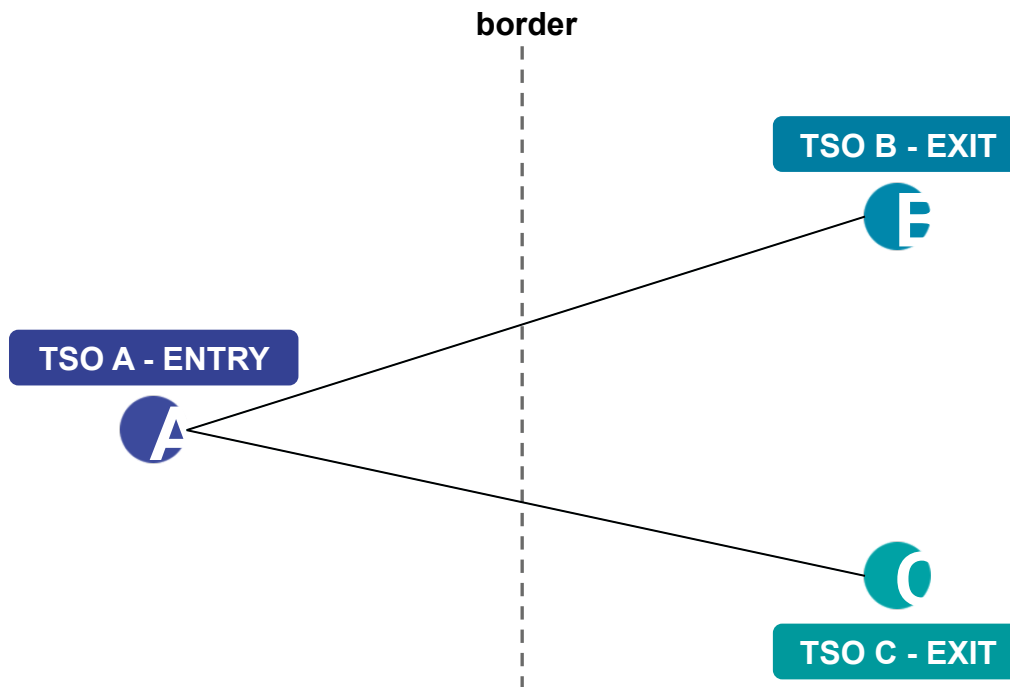
UK relevant points

- Bacton IP ASEP

- Moffat IP Exit

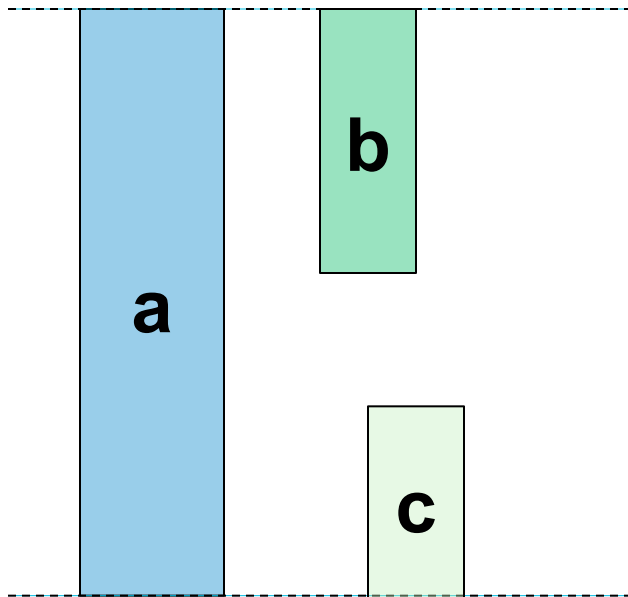National Grid is the TSO on the '1-side' for both relevant UK points.

■ Each TSO will individually determine their Available capacity. This is sent to PRISMA.

TSO A   TSO B   TSO C

■ Scenarios

1. $a \geq b + c \Rightarrow$ excess of capacity on 1-side

2. $a < b + c \Rightarrow$ excess of capacity on 2-side (in aggregate)
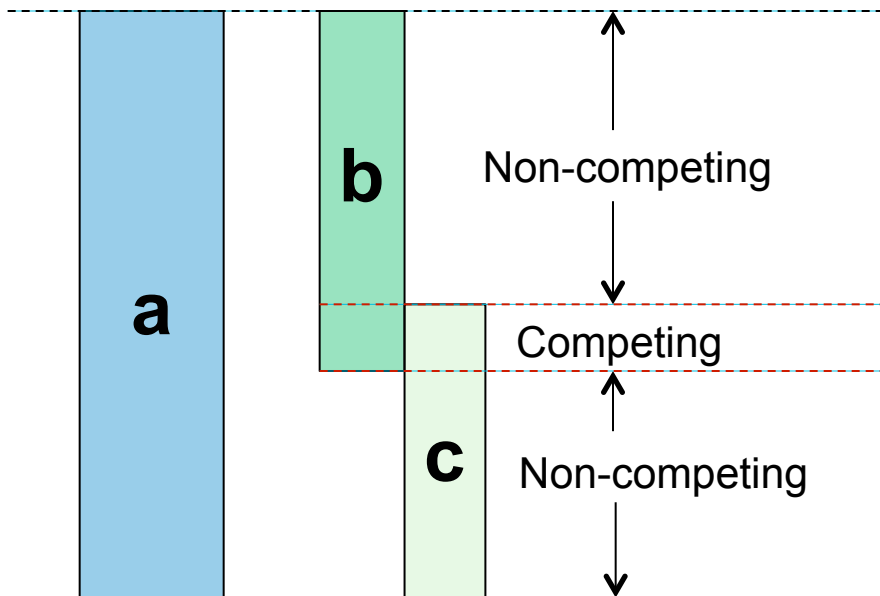
Scenario 1 - NG has excess capacity

Bundled Auction 1: A-B

- Available Capacity = b
- Competing capacity = 0

Bundled Auction 2: A-C

- Available Capacity = c
- Competing capacity = 0
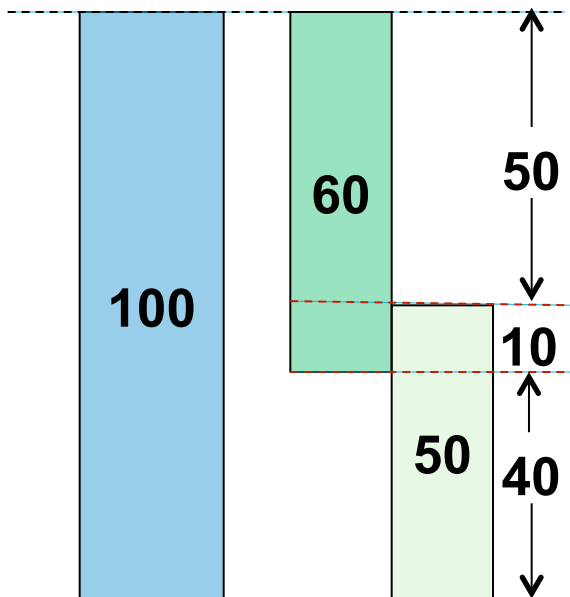
Scenario 2: NG has less capacity

Bundled Auction 1: A-B

- Available Capacity = b

- Competing capacity = (b+c-a)

Bundled Auction 2: A-C

- Available Capacity = c

- Competing capacity = (b+c-a)

Scenario 2: NG has less capacity

Bundled Auction 1: A-B

- Available Capacity = 60

- Competing amount = (60+50)-100 = 10

- Non-competing amount = 50

Bundled Auction 2: A-C

- Available Capacity = 50

- Competing amount = 10

- Non-competing amount = 40

Example bid stacks

- Aggregate demand from the 2 bundled auctions would have to exceed 100 before they are linked.

- i.e. only bid demand in excess of NG available capacity is subject to competition.

Only competition for bid demand in example D